

ABSTRACT

This invention provides a process for producing a metal body, comprising (1) a step of maintaining under reduced
5 pressure a metal material within a temperature range of room temperature to a temperature lower than a melting point of the metal in a sealed vessel to thereby degas the metal material, (2) a step of melting the metal material under pressurization by introducing a gas into the sealed container to thereby
10 dissolve the gas into the molten metal, and (3) a step of cooling and solidifying the molten metal while controlling a gas pressure and a molten metal temperature in the sealed vessel to thereby form a porous metal body.